

Title (en)  
A SEE-THROUGH FILTER FOR INJECTING OIL INTO AN ENGINE PRIOR TO ITS STARTUP

Title (de)  
FILTER ZUR EINSPRITZUNG VON ÖL IN EINEN VERBRENNUNGSMOTOR VOR SEINER INBETRIEBNAHME

Title (fr)  
FILTRE POUR HUILE MOTEUR POUVANT ETRE SURVEILLE A PRESSION PREVISIBLE ADAPTE POUR MOTEUR A COMBUSTION INTERNE UTILISE AVANT LE DEMARRAGE

Publication  
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Application  
**EP 99906022 A 19990225**

Priority  
• CN 9900022 W 19990225  
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Abstract (en)  
[origin: EP1066869A1] A transparent filter than can pressurize lubricating oil before the internal combustion engine starts. The proposal of this invention aims to provide a filter that can pressurize lubricating oil, reduce starting resistance, minimize mechanical wear, and monitor filtration quality, before the internal combustion engine starts. The transparent filter of this invention consists of a flat DC motor, a decelerator, a lubricating oil pump, a check valve, and a gauge for the lubricating oil suction pipe, a filter paper core, a transparent hood, and a pedestal base. The flat DC motor, decelerator, a lubricating oil pump, lubricating oil suction pipe check valve, gauge for the lubricating oil suction rubber pipe are connected in sequence of the top lid of the filter. The filter paper core is filled into the transparent hood. The pedestal base is identical to those of ordinary filters. <IMAGE>

IPC 1-7  
**B01D 35/00**; **F01M 1/02**; **F01M 5/02**

IPC 8 full level  
**F01M 7/00** (2006.01); **B01D 35/00** (2006.01); **B01D 35/02** (2006.01); **B01D 35/26** (2006.01); **F01M 1/02** (2006.01); **F01M 5/00** (2006.01); **F01M 5/02** (2006.01); **F01M 11/03** (2006.01); **F01M 11/10** (2006.01)

IPC 8 main group level  
**B01D** (2006.01); **F01M** (2006.01)

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**EP 1066869 A1 20010110**; **EP 1066869 A4 20030205**; AU 2608399 A 19990915; AU 750966 B2 20020801; BR 9908258 A 20001031; CA 2318870 A1 19990902; CN 1070084 C 20010829; CN 1279625 A 20010110; FI 20001747 A 20000804; GB 0021093 D0 20001011; GB 2352984 A 20010214; GB 2352984 B 20020320; HK 1029542 A1 20010406; HU P0100967 A2 20010730; HU P0100967 A3 20020128; IL 137587 A0 20010724; JP 2002504650 A 20020212; KR 20010024902 A 20010326; NO 20003840 D0 20000726; PL 342659 A1 20010702; RO 117673 B1 20020628; RU 2184248 C2 20020627; SE 0002814 D0 20000803; SE 0002814 L 20000921; WO 9943411 A1 19990902; WO 9943411 A8 20010322

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